



## SEQUENCE LISTING

<110> STONE, EDWIN M.  
SHEFFIELD, VAL C.

<120> MACULAR DEGENERATION DIAGNOSTICS AND THERAPEUTICS

<130> UIA-018.03

<140> 09/322,357

<141> 1999-05-28

<160> 74

<170> PatentIn Ver. 2.1

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<212> PRT

<213> Homo sapiens

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35 40 45

Asp Ile Val Pro Asp Ala Cys Lys Gly Gly Met Lys Cys Val Asn His  
50 55 60

Tyr Gly Gly Tyr Leu Cys Leu Pro Lys Thr Ala Gln Ile Ile Val Asn  
65 70 75 80

Asn Glu Gln Pro Gln Gln Glu Thr Gln Pro Ala Glu Gly Thr Ser Gly  
85 90 95

Ala Thr Thr Gly Val Val Ala Ala Ser Ser Met Ala Thr Ser Gly Val  
100 105 110

Leu Pro Gly Gly Gly Phe Val Ala Ser Ala Ala Ala Val Ala Gly Pro  
115 120 125

Glu Met Gln Thr Gly Arg Asn Asn Phe Val Ile Arg Arg Asn Pro Ala  
130 135 140

Asp Pro Gln Arg Ile Pro Ser Asn Pro Ser His Arg Ile Gln Cys Ala  
145 150 155 160

Ala Gly Tyr Glu Gln Ser Glu His Asn Val Cys Gln Asp Ile Asp Glu  
165 170 175

Cys Thr Ala Gly Thr His Asn Cys Arg Ala Asp Gln Val Cys Ile Asn  
180 185 190

Leu Arg Gly Ser Phe Ala Cys Gln Cys Pro Pro Gly Tyr Gln Lys Arg  
 195 200 205  
 Gly Glu Gln Cys Val Asp Ile Asp Glu Cys Thr Ile Pro Pro Tyr Cys  
 210 215 220  
 His Gln Arg Cys Val Asn Thr Pro Gly Ser Phe Tyr Cys Gln Cys Ser  
 225 230 235 240  
 Pro Gly Phe Gln Leu Ala Ala Asn Asn Tyr Thr Cys Val Asp Ile Asn  
 245 250 255  
 Glu Cys Asp Ala Ser Asn Gln Cys Ala Gln Gln Cys Tyr Asn Ile Leu  
 260 265 270  
 Gly Ser Phe Ile Cys Gln Cys Asn Gln Gly Tyr Glu Leu Ser Ser Asp  
 275 280 285  
 Arg Leu Asn Cys Glu Asp Ile Asp Glu Cys Arg Thr Ser Ser Tyr Leu  
 290 295 300  
 Cys Gln Tyr Gln Cys Val Asn Glu Pro Gly Lys Phe Ser Cys Met Cys  
 305 310 315 320  
 Pro Gln Gly Tyr Gln Val Val Arg Ser Arg Thr Cys Gln Asp Ile Asn  
 325 330 335  
 Glu Cys Glu Thr Thr Asn Glu Cys Arg Glu Asp Glu Met Cys Trp Asn  
 340 345 350  
 Tyr His Gly Gly Phe Arg Cys Tyr Pro Arg Asn Pro Cys Gln Asp Pro  
 355 360 365  
 Tyr Ile Leu Thr Pro Glu Asn Arg Cys Val Cys Pro Val Ser Asn Ala  
 370 375 380  
 Met Cys Arg Glu Leu Pro Gln Ser Ile Val Tyr Lys Tyr Met Ser Ile  
 385 390 395 400  
 Arg Ser Asp Arg Ser Val Pro Ser Asp Ile Phe Gln Ile Gln Ala Thr  
 405 410 415  
 Thr Ile Tyr Ala Asn Thr Ile Asn Thr Phe Arg Ile Lys Ser Gly Asn  
 420 425 430  
 Glu Asn Gly Glu Phe Tyr Leu Arg Gln Thr Ser Pro Val Ser Ala Met  
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 450 455 460  
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<211> 18

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<210> 9

<211> 27

<212> DNA

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<223> Description of Artificial Sequence: Primer

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<211> 23

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<210> 16  
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<210> 18

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<220>

<223> Description of Artificial Sequence: Primer

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<210> 19

<211> 25

<212> DNA

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<220>

<223> Description of Artificial Sequence: Primer

<400> 19

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<210> 20

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 20

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20

<210> 21

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 21

aaaagtattg atggtgttgg ca

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<210> 22

<211> 20

<212> DNA

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<220>

<223> Description of Artificial Sequence: Primer

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20

<210> 23

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<210> 24  
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<400> 27  
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<220>

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21

<210> 29

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<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 29

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<210> 30

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<400> 30

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<223> Description of Artificial Sequence: Primer

<400> 31

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<210> 32

<211> 20

<212> DNA

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<223> Description of Artificial Sequence: Primer

<400> 32

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<210> 33

<211> 21

<212> DNA

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<223> Description of Artificial Sequence: Primer



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<400> 35  
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<210> 37  
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<220>  
 <223> Description of Artificial Sequence: Primer

<400> 37  
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<210> 38  
 <211> 20  
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<400> 38  
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<210> 39  
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<210> 40  
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<220>  
 <223> Description of Artificial Sequence: Primer

<400> 40  
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<210> 41  
 <211> 19  
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<220>  
 <223> Description of Artificial Sequence: Primer

<400> 41  
 tttgaaactg gacccaagg 19

<210> 42  
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 <212> DNA  
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<220>  
 <223> Description of Artificial Sequence: Primer

<400> 42  
 agcataagct caatatggga gt 22

<210> 43  
 <211> 20  
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<220>  
 <223> Description of Artificial Sequence: Primer

<400> 43  
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<210> 44  
 <211> 22

<212> DNA  
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<220>  
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<400> 44  
 caacaccatc aatacttttc gg 22

<210> 45  
 <211> 21  
 <212> DNA  
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<220>  
 <223> Description of Artificial Sequence: Primer

<400> 45  
 aaggcaatga tcacatggaa g 21

<210> 46  
 <211> 523  
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 gccggggccag gccgcccgcg cgaaactggg accttgggct gcggtgcgat ccctggttcc 180  
 ggtccttaggc agcctgaaac cgaaggtagc gtgtcgggga ccagactga taagacaaaa 240  
 gagaatcagt cgctttgggc tgcccctcca cacaacctgg gactttttaa caaagctgtg 300  
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<210> 47  
 <211> 452  
 <212> DNA  
 <213> Homo sapiens

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 gttttttcct ttcgaccccc tctttctgca gcctgctttg taggtgcagt ataaaatgca 180  
 cgctgaatgt cttttgtatg taaacagcgt agcaggatgg agtaacgtga aatgcaattc 240  
 tacagcagtt tttaactgtt tgctgctctg ttcgttggct accgagaagg ttcaggaggg 300  
 ggaggggaga tgagaaagca gattggaagt tgagtatggt ggtagcctca gcctctcca 360  
 ccctcctttc ctgccttggt ctcactgcta aagttttgtt actttccccg cagcagatac 420  
 taaacattag tttgtcctgt attttctttg ag 452

<210> 48  
 <211> 88  
 <212> DNA  
 <213> Homo sapiens

<400> 48  
 attcacaatg ttgaaagccc ttttctaacc tatgctgact ctggcgctgg tcaagtcaca 60

ggacaccgaa gaaaccatca cgtacacg

88

<210> 49

<211> 1289

<212> DNA

<213> Homo sapiens

<220>

<223> "n" bases at various positions throughout the sequence may be a, t, c, g, other or unknown

<400> 49

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acacttcatt catgcttcat atctaagatt cgttgtaa atgccccctg atcctttcaa 180
aagttcattg ggctcaccac ctaagatagg aaccaacatg taatcatttg tgcaggggta 240
aaaatgggat ccgttcaaaa actaaaacca aagaaagtta catgtttcca aaacattcaa 300
caaattaatg ggtgtaagga actggaaaac ctggactcct accacatgca gataaaacca 360
atacgtgcag aataagactc aagtcaagta agaacgttaa acaccataaa gacacatggc 420
cttctttgtg tacatgacat gcattctcaa gtaagtggcc tttattgaat ttataaaggc 480
tatatatcca ttctttttgt ataacttgat aattctaata aataaaggca gacaacagtt 540
tatgtgttac caggatgcat attggctaaa gtgggtttta aacgtaatgt gtgcaactcc 600
gttttgcatt ttctaattag cgtctctgat atttccaagt aatatttgat tagttagtgt 660
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agaaaaatga aggcattgtg tgkttatctt aaaatgaaaa tgktttgkta ttcagactaa 1200
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ataaaaagatt ttacttcttt tccagttgc 1289

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<210> 50

<211> 609

<212> DNA

<213> Homo sapiens

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<223> "n" bases at various positions throughout the sequence may be a, t, c, g, other or unknown

<400> 50

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aaaatgcctg gttttcagaa ggggggtycc ataggctggt tgttcagnng gggngctaar 60
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tanggagcng gtcagggggg gaaanggagg ggctttaatn ctgtnanagg ntttnaaaaa 180
aaaaaaaaaa ntccngggct gggtnggggt gggggngggg gaaagggcca agaaaaaaa 240
aaaaaatggt nttttttttt tttacattt ccaatgtggg aaaaaaggca aattaataaa 300
gagcagtcag agaagttgga gaagattagt ctcaaaacag aaaagaagat ggtactgggc 360
anctgtacca aaaagaacag aagagtttag gcagctgatg gttgagaatg gacccccgaa 420
gctgtccaat gcacagactt gtcttttgaa aaaaaagcga tagaatgtta aaccacccat 480
ctcatcatat atctaggact ttagcacaag gattgttgcc ataagaatga agcttttaga 540
gtgatttctt aggggaatgga cacaccaatt aactgtctcc tggccccacc tttgatgttt 600
tcttcacag 609

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<210> 51

<211> 49  
 <212> DNA  
 <213> Homo sapiens

<400> 51  
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<210> 52  
 <211> 167  
 <212> DNA  
 <213> Homo sapiens

<400> 52  
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 ctcttcctgt cctgtctgtg ttataccaaa aaggcatgag cattatattt acatgtttga 120  
 tttttccctc ttagaaratt cctgacttat tttattactg accacag 167

<210> 53  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

<400> 53  
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 actatggagg atacctctgc cttccgaaaa cagcccagat tattgtcaat aatgaacagc 120  
 ctcagcagga aacacaacca gcagaaggaa cctcaggggc aaccaccggg gttgtagctg 180  
 ccagcagcat ggcaaccagt ggagtgttgc ccgggggtgg ttttgtggcc agtgctgctg 240  
 cagtcgcagg ccctgaaatg cagactggcc gaaataactt tgtcatccgg cggaacccag 300  
 ctgaccctca gcgcattccc tccaaccctt cccaccgtat ccagtgtgca gcaggctacg 360  
 agcaaagtga acacaacgtg tgccaag 387

<210> 54  
 <211> 77  
 <212> DNA  
 <213> Homo sapiens

<400> 54  
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 aattcggatc cacgttg 77

<210> 55  
 <211> 626  
 <212> DNA  
 <213> Homo sapiens

<400> 55  
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 caaaaaacaa acagctacmg ggraacggtg taatattaaa ggttgatwac acccagttat 120  
 tggttagatt tttagaaatt tgtcaatgga aattatctca aatacaatat attggatgga 180  
 aaagcaagta tcatacaatc tattaaaatt tttaacatac aaaacaatac catatgttct 240  
 aatggatgca tcctgtctta acaaaagtac aaaaacatct cagggaagga ttcattccta 300  
 ccgagacagt ggtagctgat ggggtcaagg atgaggatgg tgtgaggctt tagctgtatc 360  
 tgaaatgttt cttaacaaaa caaaatgagc caagaccaac atgacaaaat gttagcattt 420  
 gttaaatctg agcagtactc actggtattht gcaaaattat tttctgaaca cttgaaataa 480  
 tttataattht taaacatttc caatgcaaga acattataaa cttttaagaa taaagtwaaa 540  
 atttagctta agaagtggcm aaatggarga aatatcaaca tcttcacaac tgacaatyyt 600  
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<210> 56  
 <211> 123  
 <212> DNA  
 <213> Homo sapiens

<400> 56  
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 tag 123

<210> 57  
 <211> 206  
 <212> DNA  
 <213> Homo sapiens

<400> 57  
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 aagcattcca atcaaagcat tcatgtttct ttggagagtg gtagccaata attccttatt 120  
 tttttataga ctaccaatcc attttccaca ataacaagaa acaaccttaa aggttgaggc 180  
 aggagaaccc catgaagctt gaattc 206

<210> 58  
 <211> 294  
 <212> DNA  
 <213> Homo sapiens

<400> 58  
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 atccaccac caagtttatt taccactgaa tggcatgaac attgagtctt tgttcttaac 120  
 ttcttaactc agaatacaaa gtatatata aatacatata ccctaatttt aacaaaatag 180  
 gaaattatta cttttaaaaa gagattttct ctacataggt tttctagata atgtttttca 240  
 gagaatgcta attcaataat ttggttctct ttgtgtgtgt gcctgataac ctac 294

<210> 59  
 <211> 120  
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<400> 59  
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 cattttattg ccagtgcagt cctgggtttc aattggcagc aaacaactat acctgcgtac 120

<210> 60  
 <211> 171  
 <212> DNA  
 <213> Homo sapiens

<400> 60  
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<210> 61  
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 <212> DNA  
 <213> Homo sapiens

<220>

<223> "n" bases at various positions throughout the sequence may  
be a, t, c, g, other or unknown

<400> 61

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aaactttccc actgaaagtg cattcttgat ttttacatgc ctttttytcc cctttcagaa 60
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ggaaaaatgc cttttcaaca atattttcag tgcttttagaa gcattgcaaa actccgtatg 180
ggttctcaaa ggcttatgtt ataattgtaa tggaaatttaa cagaacccat ttaaaaaagt 240
taataaatag ccacagataa atcttccagt accagcattg cctgaagaag accatatcca 300
gtataagttg tcttatawca attatttata gaaattggca ttttgtwtct tgaaccaaca 360
aaagaaaaat ccgaatmccg gaaktgttat atttwttaga agcattaaat tcctttggan 420
agattnatca cacatcnac taactgtcat tcctagaaaa aatatttcgg tatttccnaa 480
agaagtatat gacagacgtt tgtagttgtt cccacaaata tganaccnaa atggatgttc 540
tccagtgagc ttctgcaggg caaataattc agctaggga ttactcactt gtcagcagat 600
gacgtaggta caaaagagta aggatatgtt taaagtstay mtatatmtgt gtgtgtatay 660
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<210> 62

<211> 120

<212> DNA

<213> Homo sapiens

<400> 62

```

atataaatga atgtgatgcc agcaatcaat gtgctcagca gtgctacaac attcttggtt 60
cattcatctg tcagtgcatt caaggatatg agctaagcag tgacaggctc aactgtgaag 120

```

<210> 63

<211> 1243

<212> DNA

<213> Homo sapiens

<400> 63

```

gtaaaactct tcccagatag tatggaataa agtccaattc ctgtgactgc tgttgtttta 60
tctgattatg taccatttta tgaaaacaaa cgcttaccga tgggaattct gttctaaaat 120
ccagttaatg tagttcagtt gttacattgc ctttttagtg tgttaccaag aaaaaggaaa 180
agaaataaaa ataactgaaa tattaggtgc aggctggctc taataattag aaaggggtgct 240
ctagcatgtt gcgtctcagt gtgttatcca gtgaccaggt atgtcagcac ctctggggag 300
cttatgagaa atgcagaatc tcaggctgca acccagacct cctgagtctg aatctacatt 360
caacaaaaac tgcaggtgac tgggtgtgcac atttaagttt cagaatagcc aagtgcattg 420
caaaacatta aaataaaaaat caggagatct ggtttctggg tctattcctg ctactgtgtg 480
acttgggcac atttcttgag ttgcctgggt ttcactttcc acatgaacaa gaggagggcc 540
atttaactag attcatgacc ttcagggtcc attgcatgtg cacatttcgt tatataattc 600
aaaaggcatt agacatcctg aggggggatgc cacagacact tgatgtccct gacctcctca 660
cggttcactc agctttacac aaagctcaaa cccaccgag agaggcctca catcatgcca 720
ttacactcaa aactgaaaga ggctacctca ggacagctgc ctctgccctt ctgagtaaac 780
tgtagggaca tcactattca gaaatgcaaa gcattcttcc cctgaaagtc agatcctgcc 840
aagctgtcat tctggaagct tgcacaggtt aggggacttg gcattcaaag ctcaaataaa 900
cttggcttca aagtcaccca atttctgaga agacaaacat gaactctaca tcctggatgg 960
gtctgcagag tccaaaatga aggcctgcaa ccacaagcca attcattcag tagtgtagtt 1020
aggctccagga ttagccaaat tgtcagcaat gattcagtaa aagtcattg aagaaaaact 1080
ttttgtgcta tgaagtcata gagggaaata agctgatatt gttagaattt gccttttagc 1140
tgcttataaa gttttgtatt tctatttcag aatttgcaat atttttactc tctttagctc 1200
acctcaaaag tgtattactt cctctggact gttgagcaga aca 1243

```

<210> 64

<211> 312

<212> DNA

<213> Homo sapiens

<220>

<223> "n" bases at various positions throughout the sequence may  
be a, t, c, g, other or unknown

<400> 64

```

aaaaaaatat atatgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtatatatta aaccagnca 60
acttaaaaaa tgtgccaag tcacacagtc gcaggaatag gacaanaagc cagatctctt 120
tatatatata taggtagata taatttttcc tcottanaat ataaataatt ttaattatat 180
ataattatatt taatatagat attttaaatc ttataattta tatatatata taattttatat 240
atatatatat atccaaagta gtggtgcaca aacttttcaa ctctgtgtcc tttctcttgt 300
ctaattcaac ag 312

```

<210> 65

<211> 120

<212> DNA

<213> Homo sapiens

<400> 65

```

acattgatga atgcagaacc tcaagctacc tgtgtcaata tcaatgtgtc aatgaacctg 60
ggaaattctc atgtatgtgc cccagggat accaagtggg gagaagtaga acatgtcaag 120

```

<210> 66

<211> 973

<212> DNA

<213> Homo sapiens

<220>

<223> "n" bases at various positions throughout the sequence may  
be a, t, c, g, other or unknown

<400> 66

```

gtaagtttat ttttttttcc atatgtagg tatttagttt tagccaggaa gagacaagag 60
gaagttatag gattctccta tagactttca tttttccac tttcaatata caatttaagc 120
tnttttttcc cctgttcac ataaaatata tacatctcat aaagagggga ttctatgcta 180
angccgacnt ttttcgtcct taaaagataa ataattttta taaaatattg atatgtattc 240
tatgtaacct acatcatctn tttgagatac atcttcaaat catccactgg aaaagattca 300
gttattaaaa ngtttcacct gtgagtttga gtttanagca taagctcaat atgggagtta 360
aacataacct catccagtct tagccctcta aaacncangg attataaatt gcgtaaaaaa 420
gtaggtgctg aaaaaagtca gcctaatatg ttgtaaaata tagttgaata ttttagagaa 480
aactactagc cccaaaatag ctaatgacct tgggtccagt ttcaaaaata acattcagat 540
gatcttcaca cctatacgta agkgaagag gcagctcccc acaatgggat gatttcagag 600
tttctcagga agatctaaaa aaaaaaagga ccctacctcc aatgttgcag gtagttgaaa 660
attttcttaa cagggaagg actgtcanat aaaacaaaa acgtaaaaaa tcctggaaaa 720
gctagtncaa acncttaaat ttacncaaag caccaaaaga atgaaaaaat gaccaanctt 780
gacanaaaac ctgtttgaat cccagctcca ctgtnttcag tctgcncaat nttgaacaaa 840
ttatcaaact actntgagcc tcagnttcct catttggaag agggagttgg ggggaatttag 900
gggaatanca tncntaaaaa tantttgtaa actataaagc ttgtncaggt caaggggttt 960
ttatnaaatt tac 973

```

<210> 67

<211> 766

<212> DNA

<213> Homo sapiens

<400> 67

```

agcctcttcc ttaacttcct ctttttccct acagtcctaa aattgctatg ctctatgagg 60
tggaacactt catagtttca cttcctgtgc tgtgttccct ctggacagta taatccactc 120

```



```

ccagcatgct tcagcttact gaaaccagat ttctagcctt tacctttctc ccaagttcct 180
gaaagagatg ataagctgcc ctccatagtt tatgcttctt gatttctcag cttggaaaagc 240
cttccctgcc ccagccatga aaactccatc taaccaccac ccttcaaggc cacgttgaga 300
tgcctcttcc ttccctcagc cttccctaata ccccttgga aaattaccca actctgctcc 360
acatgccccca gtatacttat ctatctctta cttaattcca ttttactttc taagtaatca 420
tatacacatt ccctcaatta taatgtccct gatgacaaga actggtggtt aacttttata 480
taggcagagt cagtgggttaa cattgggggtt tgaattcaac agatgaacaa taggtgcttg 540
ataaaatata atgaaatgac acatattaat ctgcctagaa tgtctcagct ctgtctgtcc 600
tgaattcaat acaatgaaca cccagtcttg tgtctaaaag caggttgaac acagtccaga 660
tgctctcaca cctccttctt tgcaaacaga atctgccagt tatatgattt aattagatca 720
gttcattagt ttagttagta aactcttga ccctacatct ctacag 766

```

<210> 68  
 <211> 124  
 <212> DNA  
 <213> Homo sapiens

```

<400> 68
atataaatga gtgtgagacc acaaatgaat gccgggagga tgaaatgtgt tggaattatc 60
atggcgggctt cgtgtgttat ccacgaaatc cttgtcaaga tccctacatt ctaacaccag 120
agaa 124

```

<210> 69  
 <211> 84  
 <212> DNA  
 <213> Homo sapiens

```

<400> 69
gtaagaaaaa tcagaacttt tgaaagtgag gattttctgg tcttaccaag ccaaactgct 60
gaatactttt gtttgtctct gcag 84

```

<210> 70  
 <211> 196  
 <212> DNA  
 <213> Homo sapiens

```

<400> 70
ccgatgtggt tgcccagtct caaatgccat gtgcgagaa ctgccccagt caatagtcta 60
caaatacatg agcatccgat ctgataggtc tgtgccatca gacatcttcc agatacaggc 120
cacaactatt tatgccaaca ccatacaatc ttttoggatt aaatctggaa atgaaaatgg 180
agagttctac ctacga 196

```

<210> 71  
 <211> 979  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <223> "n" bases at various positions throughout the sequence may  
 be a, t, c, g, other or unknown

```

<400> 71
gtaagtatcc tgaaggcagc cttaactatt gagaaagatg ggagtttggt gttgttggtg 60
ttgttggtgt tgttggtgtg tatccacatg tggaaggaaa gcaaacattt aaaagtgtct 120
tnatgtgtag gcattgtgta aggccttcca gctacattat ttcatttatt cctcttggtg 180
acactgccag atagatatta atattcatct ccatttttta cagaggagaa aagtggatg 240
cagaaagatt aagtagcatc cctgaaatca ctcaaataat aagtttggca gactctgata 300
gagttgtgtg tgaccacgaa aatacaagcc tcccatcccc ccgcctctgc cccacccaa 360

```

```

catacccccc aagtaggtat cactaatcat tgatgggttaa ttaattatac atagacatac 420
atataattca aacccaaaaat aattcctgga gtccttaaag agtttttcag acatcatgaa 480
ttcatcattg ttacattcac aagacagttt gtgttcacac cgaaactaaa acctataagt 540
atgtgagaag tgacccacc tccccgcaca gtatgtgtca agtagttgta ccttcttgcc 600
aacttctggg ctggcagtat ggagtcactt ccctatcttt cattgcctgt gtgaaatcta 660
ctttctgaat tctgccattt ccctcttcac actgtctcct gggttatott tgcttcctca 720
catccctatc tctcttctta taaactgggt cccgtcactt ccatgatccc ttcagtgggt 780
tctgagctgg tctccctgac cccaaagcct cagccttcca gtctccctac aaaatctcag 840
caagttcatt ttaagggttaa aatttggaca tattttaaat acggctcacc acttcatgtg 900
aaaatgatgg caccctacca agcagtttgc agagttaccg gtaactgttt catgctaagt 960
atgttaytca tccagttac 979

```

<210> 72

<211> 418

<212> DNA

<213> Homo sapiens

<220>

<223> "n" bases at various positions throughout the sequence may  
be a, t, c, g, other or unknown

<400> 72

```

tccctttttt ttttcyttct aaaaaggnaa cnatggccc aagnttgnaa aaanaaaaaag 60
ggccnctttg ntttccaggt ttaaaaattt ccnattttcc cctwaagttt agkttttgga 120
aaggccccc a cttcnccann aaaaggaaaa aaaatgnnta cmaanagggg gggattcaaa 180
acnaaaaaact tttttaaaaa aaaaaaaaaa caagtccttg aaacttggag ctaatgactg 240
tattagacaa gggataagag ccaagaagag ttgaaaccaa gaagggacca agtagtgggt 300
cttttatacc accttcaaaa ttctccccct aattcttata ggaggtatac taacaaagca 360
tagaaactcc aatccaagaa aattattctc ttcctttctc tattttcttt tatttttag 418

```

<210> 73

<211> 162

<212> DNA

<213> Homo sapiens

<400> 73

```

caaacaagtc ctgtaagtgc aatgcttgtg ctctgaagt cattatcagg accaagagaa 60
catatcgtgg acctggagat gctgacagtc agcagtatag ggaccttccg cacaagctct 120
gtgttaagat tgacaataat agtggggcca ttttcatttt ag 162

```

<210> 74

<211> 1111

<212> DNA

<213> Homo sapiens

<400> 74

```

tcttttctaa gagtcaacca caggcattta agtcagccaa agaattattgt taccttaaag 60
cactattttta tttatagata tatctagtgc atctacatct ctatactgta cactcacca 120
taacaaacaa ttacaccatg gtataaagtg ggcattttaat atgtaaagat tcaaagtttg 180
tctttattac tatatgtaaa ttagacatta atccactaaa ctggtcttct tcaagagagc 240
taagtataca ctatctgggtg aaacttggat tctttcctat aaaagtggga ccaagcaatg 300
atgatcttct gtggtgctta aggaaactta ctagagctcc actaacagtc tcataaggag 360
gcagccatca taaccattga atagcatgca agggtaagaa tgagttttta actgctttgt 420
aagaaaatgg aaaaggtcaa taaagatata tttctttaga aaatggggat ctgccatatt 480
tgtgttgggt tttattttca tatccagcct aaaggtgggt gtttattata tagtaataaa 540
tcattgctgt acaacatgct ggtttctgta gggatatttt aattttgtca gaaatttttag 600
attgtgaata ttttgtaaaa aacagtaagc aaaattttcc agaattocca aaatgaacca 660
gataccccct agaaaattat actattgaga aatctatggg gaggatatga gaaaataaat 720

```

tcctttctaaa	ccacattgga	actgacctga	agaagcaaac	tcggaaaata	taataacatc	780
cctgaattca	ggcattcaca	agatgcagaa	caaaatggat	aaaaggtatt	tcactggaga	840
agttttaatt	tctaagtaaa	atttaaacc	taacacttca	ctaatttata	actaaaattt	900
ctcatcttcg	tacttgatgc	tcacagagga	agaaaatgat	gatgggtttt	attcctggca	960
tccagagtga	cagtgaactt	aagcaaatta	ccctcctacc	caattctatg	gaatatttta	1020
tacgtctcct	tgtttaaaat	ctgactgctt	tactttgatg	tatcatattt	ttaaataaaa	1080
ataaatattc	ctttagaaga	tcactctaaa	a			1111